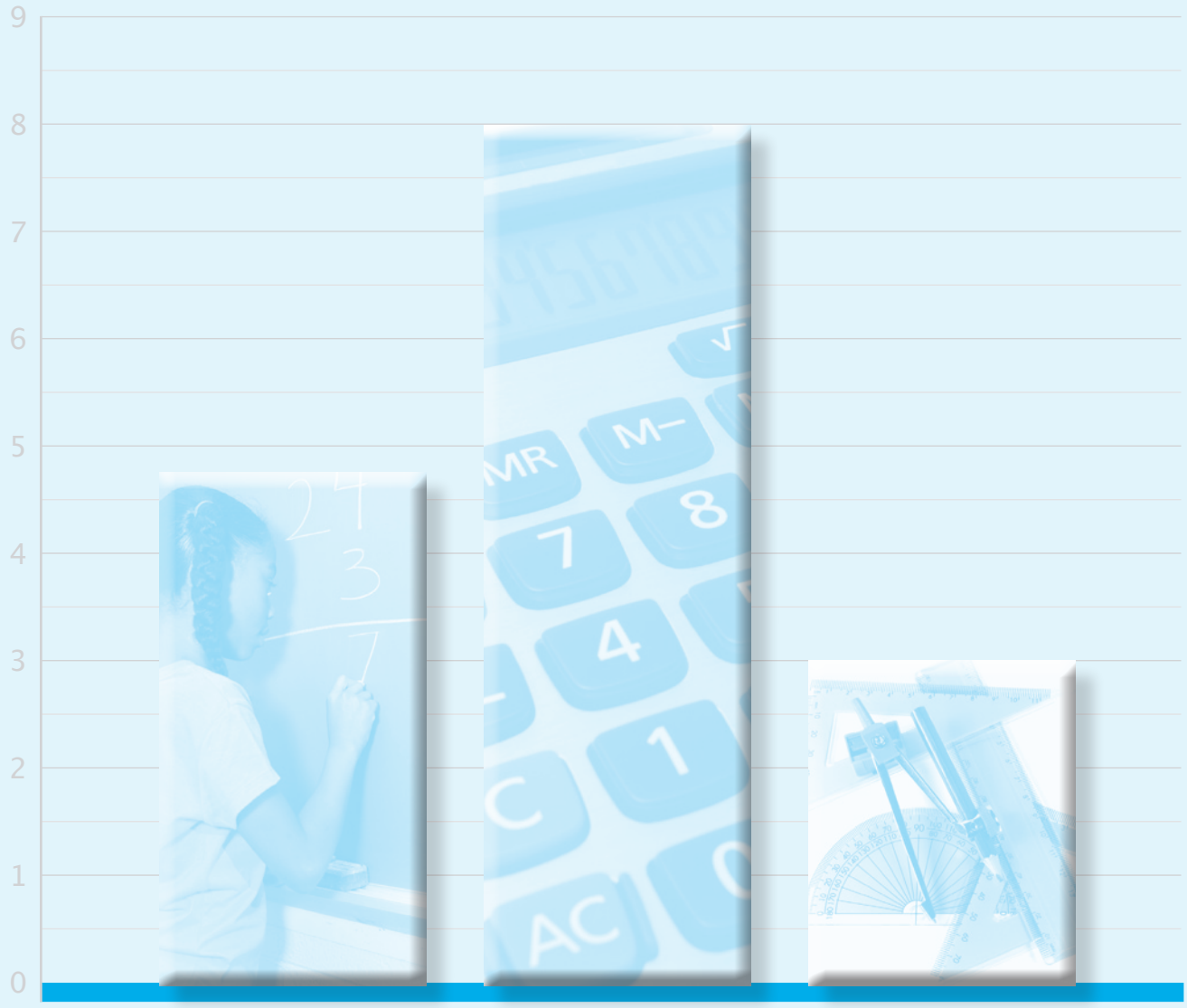
3rd
4th
5th
6th
7th
8th

Grade 3

meap™
Michigan Educational Assessment Program

# Item Descriptors




# MATHEMATICS

## FALL 2009

**MICHIGAN STATE BOARD OF EDUCATION**

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Students were instructed to read the directions below silently as the test administrator read them aloud.

# PART 1

**DIRECTIONS**

This test has two parts. You may **NOT** use a calculator on any part of this test. You may use open space in this test booklet for scratch paper.

**The items on this test are all multiple-choice.** Multiple-choice items require you to choose the best answer from among three answer choices. Mark your answer in your test booklet by completely filling in the bubble next to the correct answer. Use only a No. 2 pencil to mark your answer in your test booklet. If you erase an answer, be sure to erase it completely.

Be careful not to make any marks in the bubbles next to the letters A, B, or C except for the one that goes with your answer. You may **NOT** use any other paper to do your work.

**Sample Multiple-Choice Item:**

Julia had $5.00. She spent $2.54. How much money did she have left?

○ **A** $7.54

○ **B** $3.54

● **C** $2.46

For this sample item, the correct answer is **C**. Circle **C** is filled in.

Once you have reached the word **STOP** in your test booklet, do **NOT** go on to the next page.

If you finish early, you may check your work in Part 1 of the test **ONLY**.

Do **NOT** look at items in Part 2 of the test.

***NOTE: For each item listed throughout this booklet, the first statement is a summary of the Michigan Grade Level Content Expectation (GLCE) and the second statement or problem is the descriptor for the item's stem or question.***

**1** **N.ME.02.01:** Count to 1000 by 1s, 10s, and 100s.

Skip-count by 10s.

**A** added 10

**B** correct

**C** added 100

**2** **N.ME.02.01:** Count to 1000 by 1s, 10s, and 100s.

Skip-count by 100s.

**A** added 1

**B** added 99

**C** correct

**3** **N.ME.02.02:** Read and write numbers up to 1000.

Select the block model that matches the given numeral.

**A** over by 1 block

**B** transposed 1s blocks with 100s blocks

**C** correct

**4** **N.ME.02.02:** Read and write numbers up to 1000.

Translate the word form of a number to a numeral.

**A** incorrect value in tens place

**B** correct

**C** abc = a00,b0c

**5** **N.ME.02.03:** Compare and order numbers up to 1000.

Select the 3-digit number that is less than the given 3-digit number.

**A** correct

**B** equal value

**C** greater value

**6** **N.ME.02.03:** Compare and order numbers up to 1000.

Select the number that is greater than one number and less than the other number.

**A** correct

**B** value less than range given

**C** value greater than range given

**7** **N.FL.02.06:** Decompose 100 into addition pairs, e.g., 99 + 1.

Given the addend, select an addend to give the sum of 100.

**A** addition pair sums to 90

**B** correct

**C** addition pair sums to 110

**8** **N.FL.02.06:** Decompose 100 into addition pairs, e.g., 99 + 1.

Select the addition pair that has a value of 100.

**A** addition pair sums to 110

**B** addition pair sums to 110

**C** correct

**9** **N.MR.02.07:** Find the distance between numbers on a number line.

Given two points on a number line, find the distance in units.

**A** does not use scale, counted "hops"

**B** correct

**C** subtracted smaller values from larger values

**10** **N.MR.02.07:** Find the distance between numbers on a number line.

Given two points on number line, find the distance in units.

**A** 4 units short

**B** 2 units short

**C** correct

**11** **N.MR.02.08:** Solve a problem such as 42 + __ = 57.

x + ___ = y

**A** correct

**B** addends sum to 10 more than total

**C** added total to one of addends

**12 N.MR.02.08:** Solve a problem such as 42 + __ = 57.

x – __ = y

**A** 10 less than minuend

**B** correct

**C** 10 greater than minuend

**13 N.MR.02.09:** Solve story problems with objects and pictures.

Given two addends, find the total.

**A** subtracted instead of added

**B** 10 fewer than sum

**C** correct

**14 N.MR.02.09:** Solve story problems with objects and pictures.

Given the minuend and subtrahend, find the difference.

**A** correct

**B** 10 more than difference

**C** added instead of subtracted

**15 N.FL.02.10:** Add two numbers fluently through 99.

Add two 2-digit numbers.

**A** 10 less than sum

**B** added in tens place but subtracted in ones place

**C** correct

**16 N.FL.02.10:** Add two numbers fluently through 99.

Subtract two 2-digit numbers.

**A** correct

**B** subtracted smaller values from greater values

**C** 10 more than difference

**17 M.PS.02.02:** Compare, add, and subtract lengths.

Given two lengths in inches, find the difference.

**A** correct

**B** one less inch than difference

**C** difference of ones place of minuend minus subtrahend

**18 M.PS.02.02:** Compare, add, and subtract lengths.

Find the difference in centimeters between two objects.

**A** length of longer picture of object, not difference

**B** one more cm than difference

**C** correct

**19 M.UN.02.06:** Use the concept of duration of time.

Add 30 minutes to the time shown on the clock face.

**A** added 15 minutes instead of 30 minutes

**B** correct

**C** added 45 minutes instead of 30 minutes

**20 M.UN.02.06:** Use the concept of duration of time.

Given two times of day, find the difference in minutes.

**A** 10 minutes fewer than difference

**B** 5 minutes fewer than difference

**C** correct

**21 M.UN.02.07:** Read and write amounts of money using decimal notations.

Translate the word form for an amount in cents to decimal notation.

**A** dollars instead of cents

**B** correct

**C** hundredths of cents instead of cents

**22 M.UN.02.07:** Read and write amounts money using decimal notations.

Translate the word form for an amount in dollars to decimal notation.

**A** used both dollar and cent notation with same value

**B** correct

**C** cents instead of dollars

**23 M.PS.02.10:** Solve simple word problems involving length and money.

Given the number of coins and the cost of an item, find the number of items.

**A** number of coins in dividend

**B** one more than correct quotient

**C** correct

**24 M.PS.02.10:** Solve simple word problems involving length and money.

Find the difference in inches between two lengths.

**A** correct

**B** difference of ones place of minuend minus subtrahend

**C** added instead of subtracted

**25 M.TE.02.11:** Determine the perimeters of rectangles and triangles.

Given the lengths of all four sides, find the perimeter of the rectangle.

**A** length + width = perimeter

**B** length + length = perimeter

**C** correct

**26 M.TE.02.11:** Determine the perimeters of rectangles and triangles.

Given the perimeter, match it to the rectangle with all lengths given.

**A** area = perimeter

**B** correct

**C** area = perimeter

Students were instructed to read the directions below silently as the test administrator read them aloud.

# PART 2

**DIRECTIONS**

You will now begin Part 2 of this test. You may **NOT** use a calculator on this part of the test. You may use open space in this test booklet for scratch paper.

Be careful not to make any marks in the bubbles next to the letters A, B, or C, except for the one that goes with your answer. You may **NOT** use any other paper to do your work.

If you finish early, you may check your work for Part 2 **ONLY**.

Do **NOT** look at items in Part 1.

**27 G.GS.02.01:** Identify, describe, and compare 2-D and 3-D shapes.

Given the name, identify the drawing of the 3-D shape.

**A** 2-D version of 3-D shape

**B** incorrect 3-D shape

**C** correct

**28 G.GS.02.01:** Identify, describe, and compare 2-D and 3-D shapes.

Identify the name of a shape that is not 2-D.

**A** correct

**B** 2-D, not 3-D shape

**C** 2-D, not 3-D shape

**29 G.GS.02.02:** Explore and predict the results of putting together and taking apart 2-D and 3-D shapes.

Given the name of a 3-D shape, match it to faces.

**A** faces of incorrect 3-D shape

**B** correct

**C** faces of incorrect 3-D shape

**30 G.GS.02.02:** Explore and predict the results of putting together and taking apart 2-D and 3-D shapes.

Select two congruent 2-D shapes.

**A** incongruent shapes

**B** incongruent shapes

**C** correct

**31 G.SR.02.05:** Classify familiar plane and solid objects.

Select the shape with the same number of sides as the given shape.

**A** different number of sides from given shape

**B** correct

**C** 3-D version of 2-D shape

**32 G.SR.02.05:** Classify familiar plane and solid objects.

Name the 3-D shape, given its characteristics.

**A** correct

**B** incorrect 3-D shape

**C** incorrect 3-D shape

**33 N.FL.02.11:** Estimate the sum of two numbers with three digits.

Estimate the sum of two 3-digit numbers to the nearest 100.

**A** underestimate

**B** correct

**C** overestimate

**34 N.ME.02.22:** Know fraction equivalences of one.

Select the area model that is equivalent to 1.

**A** model of one-half

**B** model of two-fourths

**C** correct

**35 M.PS.02.08:** Add and subtract money in mixed units.

$x.yz – d dollars

**A** correct

**B** subtracted cents instead of dollars

**C** added instead of subtracted

**36 D.RE.02.03:** Solve problems using information in pictographs.

Compare the number of elements in two sets of pictures.

**A** did not use key

**B** compared incorrect sets

**C** correct

**37 N.MR.02.13:** Recognize multiplication as the total number in a set of equal groups.

Find the product that matches the given sum.

**A** correct

**B** addition instead of multiplication

**C** incorrect multiplication

**38 N.MR.02.14:** Represent multiplication using area and array models.

Given the product, match it to the array.

**A** $a \times b = a + b$

**B** correct

**C** $a \times b = b \times b$ $(a \neq b)$

**39 N.MR.02.15:** Understand the relationship of multiplication and division.

Complete the fact family, given three of four multiplication/division facts.

**A** not in fact family

**B** not in fact family

**C** correct

**40 N.MR.02.16:** Given a situation with groups of equal size, represent them with objects, words and symbols; solve.

Model how groups of equal size can be shown.

**A** groups of equal size, but incorrect number of groups

**B** correct

**C** correct number of groups, but with unequal sizes

**41 N.ME.02.18:** Use common unit fractions.

Match the given model of a fraction strip to the fraction.

**A** ratio of shaded portion to unshaded portion

**B** correct

**C** unshaded portion instead of shaded portion

**42 N.ME.02.19:** Recognize, name, and write halves, thirds, and fourths.

Match the given model of a fraction strip to the fraction.

**A** unshaded portion instead of shaded portion

**B** ratio of unshaded portion to shaded portion

**C** correct

**43 N.ME.02.20:** Place 0 and halves on a number line; relate to a ruler.

Describe the location of a point on a number line.

**A** does not include whole number of mixed number

**B** whole number of mixed number as numerator

**C** correct

**44 N.ME.02.21:** Know the denominator and fraction value relationship.

Select the unit fraction with the least value.

**A** neither greatest nor least value

**B** least denominator, not least value

**C** correct

**45 M.UN.02.01:** Measure lengths to the nearest whole unit.

Measure the object to the nearest inch.

**A** truncated fractional portion greater than one-half

**B** correct

**C** more than 1 inch greater than actual measurement

**46 M.UN.02.03:** Measure the area using non-standard units.

Measure the area of the polygon in units.

**A** one unit less than total

**B** correct

**C** one unit more than total

**47 M.TE.02.04:** Find the area of a rectangle using whole units.

Measure the area of the rectangle in square units using the grid.

**A** 2 square units too few

**B** correct

**C** 2 square units too many

**48 M.UN.02.05:** Tell time using A.M. and P.M.

Given the picture of a digital clock, translate the time to words.

**A** one hour before correct time

**B** correct

**C** one hour after correct time

**49 M.UN.02.09:** Read the temperature in degrees Fahrenheit.

Given the picture of a thermometer, read the temperature in Fahrenheit.

**A** did not use scale

**B** correct

**C** started at multiple of 10 degrees and counted down

**50 G.GS.02.04:** Know curved and straight lines, and curved and flat surfaces.

Identify the shape with a curved surface.

**A** flat surfaces

**B** flat surfaces

**C** correct

**51 G.TR.02.06:** Recognize transformed shapes.

Identify the flip of a shape.

**A** rotation

**B** correct

**C** slide

**52 G.LO.02.07:** Find and name points using simple coordinate systems.

Starting at a point on the grid, identify its location after two movements.

**A** down instead of up

**B** correct

**C** left instead of right

**53 D.RE.02.01:** Make pictographs using a scale representation.

Identify the pictograph that matches the given information.

**A** correct

**B** did not use scale

**C** transposed two categories

**54 D.RE.02.02:** Read and interpret pictographs with scales of 2 or 3.

Interpret the pictograph.

**A** did not use scale (or transposed categories)

**B** transposed categories and did not use scale

**C** correct

3rd
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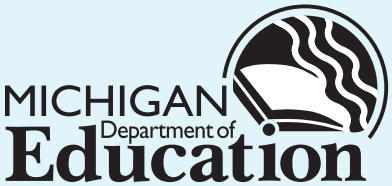


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